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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,321	04/06/2006	Marc Chilla	FA1226USPCT	3625

7590 05/18/2010
E. I. DuPont Nemours and Company
4417 Lancaster Pike
Wilmington, DE 19805

EXAMINER

FLETCHER III, WILLIAM P

ART UNIT	PAPER NUMBER
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1715

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05/18/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,321	Applicant(s) CHILLA ET AL.	
	Examiner William P. Fletcher III	Art Unit 1715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The compliant amendment filed 17 February 2010 and the remarks filed 27 November 2009 are noted with appreciation.
2. Claims 1-9 remain pending.

Response to Amendment

3. The objection to claims 4-9 is withdrawn in view of the amendment.
4. Applicant's arguments, with respect to the rejections in view of the prior art set forth in the Office action mailed 26 June 2009, have been fully considered, but they are not persuasive. UV transmission is a physical property of the coating. Since the cited prior art teaches Applicant's claimed coating materials and method, the coating thereof inherently possesses these properties. Applicant has provided no evidence establishing that the coating of the prior art does not/cannot possess these properties. Further, while none of the cited reference directly addresses UV transmission, Applicant is reminded that, as long as some motivation or suggestion to combine the references is provided by the prior art, taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor. *In re Beattie*, 974 F.2d at 1312.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlaak (US 5,976,343 A) in view of Tsunoda et al. (US 6,331,326 B1).

A. Schlaak teaches a process for the production of a multi-layer coating on a substrate comprising the successive steps of: applying a base coat layer to a pre-coated (EDC primer) substrate; applying a clear coat layer onto the base coat layer; and jointly curing the base coat and clear coat layers [abstract]. Schlaak further teaches that the base coat layer includes two layers, together totaling 17-45 microns thick [abstract]. The first coating has a thickness of 10-30 microns and the second coating has a thickness of 7-15 microns [abstract]. The first base coat layer is a water-borne base coat that is 'modified' within the context of the Applicant's disclosure (see 17:6-18:12 of the specification) because it contains an admixture component [abstract and 3:40-7:65]. The second base coat layer is a water-borne base coat that is 'unmodified' within the context of Applicant's disclosure (see 17:6-18:12 of the specification) because it

does not contain an admixture component [abstract and 3:40-7:65]. It is clear from the disclosure of Schlaak that the first and second base coating layers are formed from the same material [6:44+]. Schlaak's range of 17-45 microns overlaps Applicant's claimed range of 10-30 microns. In the case where a claimed range overlaps a range disclosed by the prior art, a *prima facie* case of obviousness exists. See MPEP 2144.05(I). Schlaak further discloses that the base coat layer(s) has/have a ratio, by weight, of pigment content to solids content of 0.03:1 to 3:1, preferably 0.06:1 to 0.6:1 [6:25-35], which encompasses Applicant's claimed range of 0.05:1 to 0.6:1. Again, in the case where a claimed range overlaps a range disclosed by the prior art, a *prima facie* case of obviousness exists. Either base coat may contain 'any conventional pigments,' with aluminum metal pigments expressly disclosed [5:30-42]. Schlaak also teaches that pigments include 'inorganic and/or organic coloured pigments and/or effect pigments and optionally fillers [5:30-42, emphasis added]. It is the Examiner's position that this teaching is inclusive of at least one, additional special effect pigment.

B. Schlaak does not expressly teach that the pigment is a metal flake pigment, present in 0.1-5 wt.% and having a thickness of 10 to 100 nm. Tsunoda teaches a paint coating composition, suitable for use in a multi-layer coating, which contains, as a metallic pigment, aluminum flakes having a thickness of 0.1-1 micron (100-1000 nm) [5:6+]. It would have been obvious to one of ordinary skill in the art to modify the process of Schlaak so as to utilize, as the aluminum

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metal pigment, the aluminum flakes having a thickness of 0.1-1 micron. One of ordinary skill in the art would have been motivated to do so by the desire and expectation of successfully pigmenting the paint coating composition(s), based on the teaching of Tsunoda that aluminum flake pigment of this size is suitable to accomplish this. With respect to pigment concentration, it is the Examiner's position that this is a result-effective variable. The pigment must be present in an amount sufficient to achieve the desired pigmentation or effect, but not so much that it adversely affects coating characteristics such as viscosity, flowability, uniformity, etc. Consequently, absent clear and convincing evidence of unexpected results demonstrating the criticality of the claimed concentration of metal flake pigment.

C. Finally, with respect to UV transmission, such is a physical property of the coating. Since the cited prior art teaches Applicant's claimed coating materials and method, it is the Examiner's position that the coating thereof inherently possesses these properties. There is no evidence of record establishing that the coating of the prior art does not/cannot possess these properties.

D. With respect to claims 4 and 5, Schlaak teaches that the base coat layer(s) may contain "any conventional pigments," with aluminum metal pigments (i.e., special effect pigment) expressly disclosed [5:30-42]. These claims are inclusive of the special effect pigment's being the only pigment. Schlaak expressly recites "inorganic and/or organic coloured pigments and/or effect pigments and optionally fillers" [5:30-42, emphasis added]. From this it is clear

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that Schlaak is inclusive of the special effect pigment's being the only pigment present (the "or" in the "and/or"). From this it is also clear that Schlaak is inclusive of at least one other pigment (the "and" in the "and/or"). Nevertheless, the concentration of a pigment in a coating composition is a result-effective variable. The pigment must be present in an amount sufficient to achieve the desired pigmentation or affect, but not so much that it adversely affects coating characteristics such as viscosity, flowability, uniformity, etc. Consequently, absent clear and convincing evidence of unexpected results demonstrating the criticality of the claimed concentration of the pigments, it would have been further obvious to one skilled in the art to modify the process of Schlaak in view of Tsunoda so as to optimize the pigment concentration by routine experimentation. Further, differences in concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. See MPEP 2144.05(II).

E. With respect to claim 6, Schlaak teaches that the modified basecoat layer may be applied by electrostatic high-speed rotary spraying and that the unmodified basecoat layer may be applied by compressed air spraying (i.e., pneumatically spray-applied) [9:27-29].

F. With respect to claims 7 and 8, Schlaak teaches that the modified basecoat contains an admixture component that imparts primer surfacer properties, specifically polyurethane resin [3:40-7:65].

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G. With respect to claim 9, Schlaak teaches that the coating layers may be applied to "automobile car bodies or parts thereof" [8:57-60].

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Sunday, 5:00 AM - 12:00 PM and Monday through Friday, 5:00 AM - 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William Phillip Fletcher III/
Primary Examiner, Art Unit 1792

May 16, 2010